

What is claimed is:

Sub C1
1. A user-input device, comprising:
2 a housing having a first end and an opposite end; and
3 a controller to indicate a position of the first end and the opposite end and
4 to cause one or more pixels of a display device to activate based on the indicated position
5 of at least the first end of the housing.

Sub B1
2. The user-input device of claim 1, further comprising a first sensor
substantially at the first end and a second sensor substantially at the opposite end,
3 wherein the controller indicates the position of the user-input device based on the signals
4 sensed by the first and second sensors.

1 3. The user-input device of claim 2, wherein the first and the second sensors
2 are transducers.

Sub B2
2 4. The user-input device of claim 1, wherein the controller transmits the
position of the first end of the housing to a processor-based system.

1 5. The user-input device of claim 1, wherein the controller indicates the
2 orientation of the housing to a processor-based system.

1 6. The user-input device of claim 5, wherein the controller causes the one or
2 more pixels to be activated based on the orientation of the housing.

1 7. The user-input device of claim 1, further comprising an activatable
2 element disposed between the first and opposite ends, wherein the controller causes the
3 one or more pixels to activate in response to an activation of the activatable element.

1 8. The user-input device of claim 7, wherein the controller provides at least
2 one of sound or air in response to the activation of the activatable element and wherein
3 the controller adjusts the intensity of pixels based on selection level of the activatable
4 element.

1 9. The user-input device of claim 7, wherein the controller allows a selection
2 of a color and wherein the controller causes the one or more pixels to be activated with
3 selected color in response to the activation of the activatable element.

1 10. The user-input device of claim 1, further comprising an optical sensor
2 located substantially at the first end, wherein the optical sensor indicates the position of
3 the housing.

1 11. The user-input device of claim 1, wherein the controller causes the one or
2 more pixels to be activated in an airbrush-like manner based on the position of the first
3 end.

1 12. A method, comprising:
2 determining a distance of a first end and a second end of a user-input
3 device relative to a display device; and
4 activating one or more pixels of the display device based on the distance
5 of the first and second ends of the user-input device relative to the display device.

1 13. The method of claim 12, comprising receiving information regarding the
2 angle of the first end of the user-input device relative to the display device.

1 14. The method of claim 12, comprising determining the distance of the user-
2 input device relative to the display device relative to the display device using
3 triangulation.

1 15. The method of claim 12, further comprising determining the orientation of
2 the user-input device relative to the display device.

1 16. The method of claim 15, further comprising activating the one or more
2 pixels based on the orientation of the user-input device.

Sub 23
1 17. An article comprising one or more machine-readable storage media
containing instructions that when executed enable a processor to:

3 determine a position of a first end and a second end of a user-input device;

4 and

5 illuminate one or more pixels of a display device based on the position of
6 the user-input device.

1 18. The article of claim 17, wherein the instructions when executed enable the
2 processor to determine an orientation of the user-input device.

1 19. The article of claim 18, wherein the instructions when executed enable the
2 processor to determine the speed of the user-input device as it is moved.

1 20. The article of claim 19, wherein the instructions when executed enable the
2 processor to illuminate the one or more pixels based on at least one of the orientation and
3 speed of the user-input device.

1 21. The article of claim 17, wherein the instructions when executed enable the
2 processor to detect an activation of an activatable element and to illuminate the one or
3 more pixels based on the activation of the activatable element.

1 22. The article of claim 21, wherein the instructions when executed enable the
2 processor to provide at least one of sound, air and light in response to the activation of the
3 activatable element.

1 23. The article of claim 21, wherein the instructions when executed enable the
2 processor to control the intensity of the illumination based on the amount of depression of
3 the activatable element.

1 24. The article of claim 17, wherein the instructions when executed enable the
2 processor to determine the position of the user-input device using triangulation.

1 25. The article of claim 17, wherein the instructions when executed enable the
2 processor to determine the position of the user-input device based on an identifiable
3 marking on the display device.

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Box
1 26. A system, comprising:
2 a plurality of sensors; and
3 a user-input device comprising a controller to receive one or more signals
4 from the plurality of sensors, transmit information to a processor-based system regarding
5 the position of the user-input device, and cause one or more pixels of a display device to
6 activate based on the transmitted information.

1 27. The system of claim 26, wherein the plurality of sensors are located on the
2 display device and wherein the controller transmits information to the processor-based
3 system regarding at least one of orientation and speed of the user-input device.

1 28. The system of claim 27, wherein the controller causes the one or more
2 pixels to activate based on at least the transmitted information regarding the orientation
3 and speed of the user-input device.

1 29. An apparatus, comprising:
2 an interface; and
3 a controller communicatively coupled to the interface, the controller to
4 receive information regarding the position of a first and second end of a user-
5 input device and to activate a portion of a display area on a display device based
6 on the position of the first and second end of the user-input device.

1 30. The apparatus of claim 29, wherein the controller determines at least one
2 or an orientation and movement of the user-input device and activates one or more pixels
3 on the display device based on at least one of the orientation and movement of the user-
4 input device.

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